

IN THE SPECIFICATION

Please amend the paragraph beginning at page 4, line 25, as follows:

Also, in the present invention, it is preferable that a non-magnetic conductive member of which ~~initial resistance~~resistivity is approximately ~~10×10^{-8}~~ 10×10^{-8} Ω m or lower or a conductive member of which ~~initial resistance~~resistivity is approximately ~~3×10^{-8}~~ 3×10^{-8} Ω m is disposed between the soft magnetic member and the object. Also, it is preferable that a non-magnetic conductive member which has a 0.015 Ω resistance which is more preferably 0.005 Ω or lower with 1 cm length, 1 cm width is disposed between the soft magnetic member and the object.

Please amend the paragraph beginning at page 5, line 7, as follows:

Also, the reader/writer of the present invention is formed by disposing the above reader/writer on a casing which is formed by a non-magnetic material member of which ~~initial resistance~~resistivity is approximately 10×10^{-8} Ω m or lower. Also, it is preferable that the case is formed by a conductive member which has a 0.015 Ω resistance which is more preferably 0.005 Ω or lower with 1 cm length, 1 cm width.

Please amend the paragraph beginning at page 8, line 9, as follows:

In a preferable embodiment, an RFID reader/writer of the present invention is provided with a soft magnetic member which is formed by composite with approximately 100 mm thickness or thinner which is formed by a metal powder, a flake, a ferrite and an organic member, a ferrite etc., an amorphous film, or a layered member of an amorphous film between an antenna coil which is formed by at least one turn loop and a conductive object such as a metal casing for installing an antenna coil and a conductive member such as a metal plate of which ~~initial resistance~~resistivity is approximately 10×10^{-8} Ω m or smaller, more

preferably, approximately $3 \times 10^{-8} \Omega \text{m}$ or smaller, or a resistance which has 1 cm length and 1 cm width has approximately 0.015Ω or lower, more preferably 0.005Ω or lower. It is possible to block the magnetic flux which enters into the conductive member by the soft magnetic member and the conductive member so as to restrict the influence thereof. Also, it is possible to block a radiowave which leaks from an electronic circuit of the reader/writer effectively by the conductive member.

Please amend the paragraph beginning at page 9, line 15, as follows:

Also, if a member for the metal surface 6 such as a casing is used such as a non-magnetic aluminum plate, or a magnesium die-cast which has approximately $10 \times 10^{-8} \Omega \text{m}$ or lower, more preferably $3 \times 10^{-8} \Omega \text{m}$ or lower of ~~initial resistance~~resistivity, or a member which has 1 cm length and 1 cm width and approximately $0.015 \Omega \text{m}$ or lower, or more preferably approximately $0.005 \Omega \text{m}$ or lower is used, it is possible to omit the conductive member 7 by selecting the resonating frequency while contacting thereof.

Please amend the paragraph beginning at page 13, line 3, as follows:

Here, an ordinary silicon iron contains 5 w% of silicon or lower such that the ~~initial resistance~~resistivity is $67 \times 10^{-8} \Omega \text{m}$ or lower. If more silicon is contained, the ~~initial resistance~~resistivity increases; thus, a loss decreases. However, problems occur such as a segregation in a casting operation, a crack in a casting operation, or an excessive hardness for a roll stripping operation. If a powder is produced according to a water-atomizing method such that the silicon is contained there by 6 w% or higher, a fine melt powder is cooled rapidly; therefore, there is not a problem such as a segregation. Also, such a fine organization is not fragile; thus, it is possible to flatten mechanically. Such a flattening operation is performed by a device such as a ball mill, and an attritor. If the silicon increases,

the ~~initial resistance~~resistivity increases; thus, the loss decreases. Also, viscosity of the melt metal decreases; thus it is possible to obtain a fine powder by performing a water-atomize method. If it exceeds 15 w%, there occurs a problem in that a saturated magnetic flux density decreases. Therefore, it is preferable that the silicon should be contained therein by 6 w% to 15 w%.

Please amend the paragraph beginning at page 13, line 19, as follows:

Al; Although if the contents increases, there is an effect for increasing the ~~initial resistance~~resistivity, the viscosity of the melt metal increases; thus 1 w% is preferable or lower.

Please amend the paragraph beginning at page 13, line 25, as follows:

Cr; If the contents increase, the ~~initial resistance~~resistivity increases; thus, the loss is reduced. Also, there is an effect for enhancing a resistance for an oxidization in a high temperature condition. If the contents exceeds 5 w%, the saturated magnetic flux density decreases; therefore, 5 w% is preferable or lower.

Please amend the paragraph beginning at page 19, line 3, as follows:

In such a case, it is necessary to set an electric resistance in the conductive member 7 at a predetermined value because it is necessary to block the magnetic flux reliably and maintain the loss of Q which is caused by the conductive member 7 within an adjustable range. Here, the Inventor of the present Patent Application calculated the variance in Q of the antenna coil under condition that ~~an initial resistance~~ a resistivity r of the sample in which 7 μm thickness foil is used varies. Results of the experiments are shown in TABLE 2.

Please amend the paragraph beginning at page 20, line 3, as follows:

Here, the voltage for L or C during the resonance is Q in a power supply voltage; therefore, it is necessary to set Q at a certain value. That is, it is necessary to set Q at least 5 or greater. More commonly, it is necessary to set Q at 10 or greater. Therefore, the Q cannot use the antenna which has a value 5 or fewer. If the value is equal to 10 or greater, it is possible to use in many antennae. In addition, in order to set the Q value to be 5 or greater, more preferably to be 10 or greater, according to the TABLE 2 in which a foil which has 7 μm thickness is used, it is possible to determine that the ~~initial resistance~~resistivity should be approximately ~~10×10^{-8}~~ $10 \times 10^{-8} \Omega\text{cm}$ or fewer, more preferably ~~3×10^{-8}~~ $3 \times 10^{-8} \Omega\text{cm}$ or fewer. For a metal member which satisfies such a resistance condition, it is possible to name a pure copper, aluminum, brass, aluminum bronze, platinoid, titanium, SUS304, and inconel. By forming the conductive member 7 by using these material members, it is possible to prevent the influence of the metal surface 6 completely while restricting the loss in Q. In contrast, if the metal surface 6 is formed by a material member which satisfies the above condition, it is possible to omit the conductive member 7.

Please amend the paragraph beginning at page 21, line 1, as follows:

In the TABLE 2, explanations are made for a preferable ~~initial resistance~~resistivity in which a foil which has 7 μm thickness. If the thickness of the foil is thicker, the resistance in the conductive member 7 decreases and the loss in Q decreases. In TABLE 3, a resistance (Ω) is shown in a longitudinal direction of 1 cm length and 1 cm width under condition that the thickness of the foil in the TABLE 2 is varied. According to the TABLE 3, if the thickness of the foil varies, the preferable range for the ~~initial resistance~~resistivity varies accordingly. That is, if the thickness of the foil increases, an upper limit value for the ~~initial resistance~~resistivity increases.

Please amend Table 3 beginning at page 22, as follows:

TABLE 3

Initial resistance <u>Resistivity</u> of material member	Thickness of conductive member (μm)							
	7	30	50	100	200	300	400	500
$\times E-8 \Omega \text{m}$								
1.6	0.0020	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2.4	0.0030	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0070	0.0020	0.0010	0.0010	0.0000	0.0000	0.0000	0.0000
6	0.0090	0.0020	0.0010	0.0010	0.0000	0.0000	0.0000	0.0000
7	0.0100	0.0020	0.0010	0.0010	0.0000	0.0000	0.0000	0.0000
8	0.0110	0.0030	0.0020	0.0010	0.0000	0.0000	0.0000	0.0000
9	0.0130	0.0030	0.0020	0.0010	0.0000	0.0000	0.0000	0.0000
10	0.0140	0.0030	0.0020	0.0010	0.0010	0.0000	0.0000	0.0000
15	0.0210	0.0050	0.0030	0.0020	0.0010	0.0010	0.0000	0.0000
20	0.0290	0.0070	0.0040	0.0020	0.0010	0.0010	0.0010	0.0000
25	0.0360	0.0080	0.0050	0.0030	0.0010	0.0010	0.0010	0.0010
30	0.0430	0.0100	0.0060	0.0030	0.0020	0.0010	0.0010	0.0010
35	0.0500	0.0120	0.0070	0.0040	0.0020	0.0010	0.0010	0.0010
40	0.0570	0.0130	0.0080	0.0040	0.0020	0.0010	0.0010	0.0010
50	0.0710	0.0170	0.0100	0.0050	0.0030	0.0020	0.0010	0.0010
60	0.0860	0.0200	0.0120	0.0060	0.0030	0.0020	0.0020	0.0010
70	0.1000	0.0230	0.0140	0.0070	0.0040	0.0020	0.0020	0.0010
80	0.1140	0.0270	0.0160	0.0080	0.0040	0.0030	0.0020	0.0020
90	0.1290	0.0300	0.0180	0.0090	0.0050	0.0030	0.0020	0.0020
100	0.1430	0.0330	0.0200	0.0100	0.0050	0.0030	0.0030	0.0020
150	0.2160	0.0500	0.0300	0.0150	0.0080	0.0050	0.0040	0.0030
200	0.2180	0.0670	0.0400	0.0200	0.0100	0.0070	0.0050	0.0040

Please amend the paragraph beginning at page 22, line 2, as follows:

Here, the resistance (the resistance in a longitudinal direction of the sample which has 1 cm width, 1 cm length) and Q are measured for the above material member under condition that the thickness is varied. Results of the experiments are shown in TABLE 4. Also, the ~~initial resistance~~resistivity and the organization for each material member is shown in TABLE 5.

Please amend Table 5 beginning at page 23, as follows:

TABLE 5		
	Initial resistance Resistivity ($\times 10^{-8} \Omega \text{ cm}$)	Organization
Pure copper	1.6	Cu
Aluminum	2.4	Al
Brass	6.2	30% Zn Rest of them Cu
Aluminum bronze	10	5% AL Rest of them Cu
Platinoid	19.2	20% Zn-15% Ni Rest of them Cu
Titanium	48	Ti
SUS304	70	18% Cr-8% Ni Rest of them Fe
Inconel	103	16% Cr-6%Fe Rest of them Ni

Please amend the paragraph beginning at page 33, line 15, as follows:

The reason is that the soft magnetic member is disposed between the antenna coil and the metal surface so as to pass the magnetic flux which is generated by the antenna coil through the soft magnetic member; thus, it is possible to restrict the influence of the eddy current which is generated in the metal member. Also, it is because that it is possible to cut the magnetic flux reliably by disposing the conductive member which has a predetermined ~~initial resistance~~resistivity between the soft magnetic member and the metal surface.

Please delete the Abstract at page 39, lines 1-15, and add a new Abstract as shown on the next page.